

SYSTEM **P**LANNING & **A**NALYSIS **R**EPORT

S-75

T.H. 52
T.H. 110 TO ANNAPOLIS STREET

S.P. 1908-15

FEBRUARY, 1972

PREPARED BY
OFFICE OF SYSTEM PLANNING



**MINNESOTA
DEPARTMENT
OF HIGHWAYS**

DEPARTMENT HIGHWAY - Statewide Planning
Room 807 Ext. 3158

Office Memorandum

TO : Paul G. Velz
Road Design Engineer

DATE: January 25, 1972

FROM : Morris Gildemeister, Chief
Statewide Planning Section

SUBJECT: T.H. 52, Mendota Road to Annapolis Street
S.P. 1908-15
System Planning & Analysis Report S-75

The Statewide Planning Section transmits this report in response to K. K. McRae's February 2, 1971 request for the 1985 ADT, DHV, and HCADT for the project location shown on the map on page 2.

The estimated 1985 ADT volumes are shown on the map on page 3.

For each segment numbered on the map on page 3, the following data are tabulated on pages 4 - 7:

- (a) Total ADT
- (b) Vehicle Type Distribution
- (c) Total HCADT

The basic data, method, and assumptions used to prepare this report are presented on page 8.

Morris Gildemeister

Morris Gildemeister, Chief
Statewide Planning Section

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STATE OF MINNESOTA
DEPARTMENT OF HIGHWAYS
WORK MAP

Project Location
S.P. 1908-15



TRAFFIC ESTIMATE DATA

DESIGN YEAR 1985 PART 1 OF 4

FOR

T.H. 52 S.P. 1908-15 LENGTH --- MILESCOUNTY Dakota LOCATION T.H. 110 to Annapolis Street

BASED ON

1985 ADT FROM TRAFFIC ANALYSIS UNIT

SHOWING

TOTAL ADT ON SEGMENTS 1 THROUGH 11 AS

DEFINED ON ATTACHED INDEX MAP

VEHICLE * TYPE	SEGMENT NUMBER										
	1	2	3	4	5	6	7	8	9	10	11
0	5726	2054	14473	14474	2055	5727	3210	2086	1413	6487	1334
1	2.4 145	1.2 25	2.9 444	443	24	144	102	64	46	164	35
2	0.3 20	0.1 3	1.0 154	154	3	20	30	16	15	32	9
3	0.3 18	0.1 3	0.2 32	32	3	18	7	4	3	17	3
4	0.1 6	0.05 1	0.2 29	29	1	6	7	4	3	7	1
5	0.4 25	0.2 4	0.5 77	77	4	25	7	4	3	24	5
6	1.0 60	0.5 10	0.6 91	91	10	60	37	22	17	69	13
TOTAL ADT	6000	2100	15300	15300	2100	6000	3400	2200	1500	6800	1400
TOTAL H. COMM. ADT	4.5 274	2.1 46	5.4 827	826	45	273	190	114	87	313	66
TOTAL DHV											
DIRECTIONAL DISTRIBUTION											

* VEHICLE TYPE CODE

0 = PASSENGER CARS AND 4 TIRE TRUCKS
 1 = SINGLE UNIT-2 AXLE-6 TIRE TRUCKS
 2 = SINGLE UNIT-3 AXLE TRUCKS
 3 = TRACTOR-TRUCK OR SEMI-TRAILER- 3 AXLES
 4 = TRACTOR-TRUCK OR SEMI-TRAILER - 4 AXLES
 5 = TRACTOR-TRUCK OR SEMI-TRAILER - 5 AXLES
 6 = BUSES AND TRUCKS WITH TRAILERS

TRAFFIC ESTIMATE DATA

DESIGN YEAR 1985 PART 2 OF 4

FOR

T.H. 52 S.P. 1908-15 LENGTH --- MILESCOUNTY Dakota LOCATION T.H. 110 to Annapolis Street

BASED ON

1985 ADT FROM TRAFFIC ANALYSIS UNIT

SHOWING

TOTAL ADT ON SEGMENTS 12 THROUGH 22 AS

DEFINED ON ATTACHED INDEX MAP

VEHICLE * TYPE	SEGMENT NUMBER										
	12	13	14	15	16	17	18	19	20	21	22
0	4405	4390	1453	6710	6231	1250	1826	6817	3676	2434	8394
1	105	114	24	151	139	38	54	153	48	22	160
2	14	16	7	30	28	4	5	29	11	3	26
3	9	7	4	17	16	2	3	17	4	2	18
4	6	4	2	7	6	1	2	5	6	5	9
5	9	11	3	22	22	1	3	22	7	2	20
6	52	58	7	63	58	4	7	57	48	32	73
TOTAL ADT	4600	4600	1500	7000	6500	1300	1900	7100	3800	2500	8700
TOTAL H. COMM. ADT	195	210	47	290	269	50	74	283	124	66	306
TOTAL DHV											
DIRECTIONAL DISTRIBUTION											

* VEHICLE TYPE CODE

0 = PASSENGER CARS AND 4 TIRE TRUCKS
 1 = SINGLE UNIT-2 AXLE-6 TIRE TRUCKS
 2 = SINGLE UNIT-3 AXLE TRUCKS
 3 = TRACTOR-TRUCK OR SEMI-TRAILER- 3 AXLES
 4 = TRACTOR-TRUCK OR SEMI-TRAILER - 4 AXLES
 5 = TRACTOR-TRUCK OR SEMI-TRAILER - 5 AXLES
 6 = BUSES AND TRUCKS WITH TRAILERS

TRAFFIC ESTIMATE DATA

DESIGN YEAR 1985 PART 3 OF 4

FOR

T.H. 52 S.P. 1908-15 LENGTH --- MILES
COUNTY Dakota LOCATION T.H. 110 to Annapolis Street

BASED ON

1985 ADT FROM TRAFFIC ANALYSIS UNIT

SHOWING

TOTAL ADT ON SEGMENTS 23 THROUGH 33 AS
DEFINED ON ATTACHED INDEX MAP

VEHICLE * TYPE	SEGMENT NUMBER										
	23	24	25	26	27	28	29	30	31	32	33
0	8776	2212	1537	9541	2409	1831	9927	1648	4514	3532	1913
1	169	49	37	192	51	41	202	29	106	100	48
2	30	7	4	31	8	6	33	3	9	7	4
3	18	4	3	19	4	2	19	3	7	5	3
4	10	2	2	11	3	1	11	2	4	3	1
5	21	6	2	23	5	4	22	3	6	5	2
6	76	20	15	83	20	15	86	12	54	48	29
TOTAL ADT	9100	2300	1600	9900	2500	1900	10300	1700	4700	3700	2000
TOTAL H. COMM. ADT	324	88	63	359	91	69	373	52	186	168	87
TOTAL DHV											
DIRECTIONAL DISTRIBUTION											

* VEHICLE TYPE CODE

0 = PASSENGER CARS AND 4 TIRE TRUCKS
1 = SINGLE UNIT-2 AXLE-6 TIRE TRUCKS
2 = SINGLE UNIT-3 AXLE TRUCKS
3 = TRACTOR-TRUCK OR SEMI-TRAILER- 3 AXLES
4 = TRACTOR-TRUCK OR SEMI-TRAILER - 4 AXLES
5 = TRACTOR-TRUCK OR SEMI-TRAILER - 5 AXLES
6 = BUSES AND TRUCKS WITH TRAILERS

TRAFFIC ESTIMATE DATA

DESIGN YEAR 1985 PART 4 OF 4

FOR

T.H. 52 S.P. 1908-15 LENGTH --- MILES
COUNTY Dakota LOCATION T.H. 110 to Annapolis Street

BASED ON

1985 ADT FROM TRAFFIC ANALYSIS UNIT

SHOWING

TOTAL ADT ON SEGMENTS 34 THROUGH 40 AS
DEFINED ON ATTACHED INDEX MAP

VEHICLE * TYPE	SEGMENT NUMBER										
	34	35	36	37	38	39	40				
0	10455	10743	3645	3451	2689	2398	11502				
1	244	250	91	87	67	61	278				
2	32	32	14	14	6	6	36				
3	19	19	7	7	4	4	20				
4	10	10	6	6	2	2	12				
5	20	23	4	4	5	5	26				
6	120	123	33	31	27	24	126				
TOTAL ADT	10900	11200	3800	3600	2800	2500	12000				
TOTAL H. COMM. ADT	445	457	155	149	111	102	498				
TOTAL DHV											
DIRECTIONAL DISTRIBUTION											

* VEHICLE TYPE CODE

0 = PASSENGER CARS AND 4 TIRE TRUCKS
1 = SINGLE UNIT-2 AXLE-6 TIRE TRUCKS
2 = SINGLE UNIT-3 AXLE TRUCKS
3 = TRACTOR-TRUCK OR SEMI-TRAILER- 3 AXLES
4 = TRACTOR-TRUCK OR SEMI-TRAILER - 4 AXLES
5 = TRACTOR-TRUCK OR SEMI-TRAILER - 5 AXLES
6 = BUSES AND TRUCKS WITH TRAILERS

Basic Data, Methods and Assumptions

Transmitted February, 1971, M-55 contains 1985 ADT and peak hour volumes. Total heavy commercial volumes basically agree with System 14 computer volumes.

Vehicle type distributions were based on land use study and vehicle classification counts recorded in the area. It is assumed that traffic volumes divert from T.H. 52 to proposed parallel T.H. 3 one mile east of T.H. 52.

The 1990 volumes for this project may be obtained by increasing 1985 volumes by 15 percent.